



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,971	01/31/2001	Eric G. Lang	MS#150411.1/40062.86US01	6285
7590	12/08/2003		EXAMINER	
Homer L. Knearl Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			JOSEPH, THOMAS J	
			ART UNIT	PAPER NUMBER
			2174	

DATE MAILED: 12/08/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/773,971	LANG, ERIC G.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thomas J Joseph	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 31 January 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-32 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-32 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because they fail to show necessary textual labels of features or symbols in Figs. 1 as described in the specification. For example, placing a label, "display", with element 106 and "expansion slot" with element 114 of Fig. 1, would give the viewer necessary detail to fully understand this element at a glance. A descriptive textual label for *each numbered element* in these figures would be needed to fully and better understand these figures without substantial analysis of the detailed specification. Any structural detail that is of sufficient importance to be described should be shown in the drawing. Optionally, applicant may wish to include a table next to the present figure to fulfill this requirement. See 37 CFR 1.83. 37 CFR 1.84(n)(o) is recited below:

"(n) Symbols. Graphical drawing symbols may be used for conventional elements when appropriate. The elements for which such symbols and labeled representations are used must be adequately identified in the specification. Known devices should be illustrated by symbols which have a universally recognized conventional meaning and are generally accepted in the art. Other symbols which are not universally recognized may be used, subject to approval by the Office, if they are not likely to be confused with existing conventional symbols, and if they are readily identifiable.

(o) Legends. Suitable descriptive legends may be used, or may be required by the Examiner, where necessary for understanding of the drawing, subject to approval by the Office. They should contain as few words as possible."

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 2174

3. Claims 1 – 16 and 26 – 32 are rejected under 35 U.S.C. 102(a) as being anticipated by Capps et al. (US 6,512,525).

**Claim 1:**

Capps teaches a method for providing a user interface for a smart watch device (fig. 2; fig. 10a). Capps demonstrates a handheld device that includes a clock. Such a device is considered a type of smart watch device. Capps teaches a smart watch device having a GUI including a display and at least one element (fig. 2; fig. 10a). Capps teaches displaying an information screen in a display foreground (fig. 10a). Capps teaches displaying at least one control image in a display background (fig. 10a, #280). Capps teaches displaying background appearing behind the display foreground (fig. 10a, #274). Capps teaches a control image indicating a task to be performed by the electronic device when the input element with the input element to be activated (fig. 10a, #280). Capps teaches associating the control image with the input element (fig. 10a, #280).

**Claim 2:**

Capps teaches receiving an activation signal from the input element (fig. 10a, #280). When control element is selected, an activation signal is received.

**Claim 3:**

Capps teaches performing the task associated with the input element after the activation signal is received (fig. 10a, #280).

**Claim 4:**

Capps teaches an act of associating that comprises positioning the virtual control image proximate to the input element (fig. 10a, #280).

**Claim 5:**

Capps teaches a user interface for an electronic device having a display area in an overlaid fashion (fig. 10a, #274). Capps teaches displaying control images and information images in a same display area in an overlaid fashion (fig. 10a, #280). Capps teaches control images being associated with an input element (fig. 7). Capps teaches receiving an activation signal from the input element indicating a stroke of the input element and thereby activation of a control represented by the control image (fig. 3, #”G”, #151, #162).

**Claim 6:**

Capps teaches an input element having multiple strokes and each control image being associated with one of the multiple strokes of the input element (fig. 8b, #270).

**Claim 7:**

Capps teaches an information image being overlaid on the control image so that the information image is in the foreground and the control images are in the background (fig. 3, #151, #128).

**Claim 8:**

Capps teaches control images being laid on the information image so that the control image is in the foreground and the information image is in the background (fig. 8b, #268).

**Claim 9:**

Capps teaches a control image being associated with a control task to be executed after an activation signal is received (fig. 8b, #268).

**Claim 10:**

Capps teaches a user interface for an electronic device having a display area in an overlaid fashion (fig. 8b, #268). Capps teaches generating an information screen (fig. 8b). Capps teaches generating a control screen having at least one control image (fig. 3, #128). Capps teaches associating the control image having an input element (fig. 3, #128). Capps teaches combining the information screen and the control screen into a composite screen such that the information screen and the control screen appear in an overlapping fashion (fig. 9). Capps teaches displaying the composite screen in the display (fig. 9).

**Claim 11:**

Capps teaches associating an operation that includes positioning the control image proximate the input element (fig. 9, #272).

**Claim 12:**

Capps teaches combining operations that includes blending the information screen and the control screen such that the information appears in front of the control screen (fig. 7, #254).

**Claim 13:**

Capps teaches generating the control screen operation including indicating a task to be performed by the electronic device when the input element is activated (fig. 8b, #270).

**Claim 14:**

Capps teaches combining the operation including blending the information screen and the control screen such that the control screen appearing in front of the information screen (fig. 8b, #270).

**Claim 15:**

Capps teaches an operation for receiving an activation signal from the input element (fig. 8b, #270).

**Claim 16:**

Capps teaches an operation for performing the task associated with the input element after the activation signal is received (fig. 8b, #270).

**Claim 26 and 32:**

Capps teaches software that requires a computer readable medium (fig. 8a). Capps teaches inputting characters to an electronic device (fig. 8a). Capps teaches the electronic device having a GUI including the display and a plurality of input elements (fig. 8a). Capps teaches displaying an information screen in a display foreground (fig. 8a). Capps teaches displaying a control screen in a display background, the display background appearing behind the display foreground (fig. 8a). Capps teaches loading a character set, the character set including a plurality of individual characters (fig. 8a, #266). Capps teaches dividing the character set into character subsets (fig. 8a, #266). The whole set is always a subset of itself. Caps lock and shift also accesses a subset of the main character set. Capps teaches representing the character subsets in the control screen (fig. 8a, #266). Capps teaches receiving a selection signal for one of the

character subsets (fig. 8a, #266). When shift or caps is selected, a selection signal for a character subset is received. Capps teaches narrowing a selection signal for one of the character subsets (fig. 8a, #266). Capps teaches narrowing the range of the selectable character set to the selected character subset (fig. 8a, #266). Capps teaches repeating the dividing, representing, receiving, and narrowing operations until a selection of one of the individual characters is made (fig. 8a, #266). The use of a virtual keyboard with a shift key narrows until individual characters are made. Particularly when shift keys are used.

**Claim 27:**

Capps teaches an operation of combining the information screen and the control screen into a composite screen such that the information screen and control screen appear in an overlapping fashion (fig. 8b, #268).

**Claim 28:**

Capps teaches representing operations including the operation for providing control images for the character subsets (fig. 4b, #219).

**Claim 29:**

Capps teaches the operation of associating the control images with the input elements (fig. 4b). Any selectable item such as an icon is also an input element.

**Claim 30:**

Capps teaches associating operation including positioning the control images proximate the input elements (fig. 3, #128).

**Claim 31:**

Capps teaches including the operation of generating a selection signal from the input elements (fig. 3, #128).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17 – 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Capps et al. (US 6,512,525) and Menendez et al (US 5,555,369).

**Claim 17 and 20:**

Capps teaches software that requires a computer readable medium (fig. 8b).

Capps teaches a user interface for an electronic device having a display area in an overlaid fashion (fig. 8b). Capps teaches one input element adapted to provide an activation signal when the input element is activated (fig. 8b). Capps teaches an application module coupled with the input element, the application module performing at least one task in response to the activation signal (fig. 8b). Capps teaches an information module coupled with the application module, the information module receiving at least one information image from the application module (col. 3, lines 15 – 40). Capps teaches a control module coupled with the application module, the control image being associated with the input element (col. 3, lines 15 – 40).

Capps fails to teach rendering a module coupled with the information module and the control module, the rendering module creating a display image. Menendez teaches

rendering a module coupled with the information module and the control module, the rendering module creating a display image (fig. 8). Menendez teaches the display image formatting the content image and control image such that the content image appearing in front of the control image (fig. 8). Menendez teaches a display element coupled with the rendering module, the display element displaying the display image (fig. 8). It would have been obvious to one with ordinary skill in the art at the time of the invention to combine rendering a module coupled with the information module and the control module, the rendering module creating a display image taught by Menendez with the information module coupled with the application module, the information module receiving at least one information image from the application module associated with the graphical interface disclosed by Capps. Doing so provides separate software areas or units for processing different types of data. This aids both with orderly processing and orderly troubleshooting.

**Claim 18:**

Capps fail to teach a separate module for the application program interface. Menendez et al (US 5,555,369) teaches the control module including at least one control application programming interface adapted to receive a plurality of control call parameters from the application module (col. 14, lines 42 – 60). It would have been obvious to one with ordinary skill in the art to combine the control application programming interface taught by Menendez with the hand-held smart watch device disclosed by Capps. Doing so enables the user to customize the said device according to personal desire.

**Claim 19:**

Menendez teaches the information module including at least one content application-programming interface adapted to receive a plurality of content call parameters from the application module (col. 14, lines 42 – 60).

**Claim 21:**

Capps teaches combining in the computer process comprising blending the information screen and the control screen such that the information screen appears in front of the control screen (fig. 15c, #392).

**Claim 22:**

Capps teaches the act of generating the control screen in the computer process further comprising indicating a task to be performed by the electronic device when the input element is activated (fig. 15c, #394).

**Claim 23:**

Capps teaches combining in the computer process comprising blending the information screen and the control screen such that the control screen appears in front of the information screen (fig. 15c, #392).

**Claim 24:**

Capps teaches a computer process further comprising receiving an activation signal from the input element (fig. 15c, #392).

**Claim 25:**

Capps teaches a computer process further comprising performing the task associated with the input element after the activation signal is received (fig. 15c, #392).

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J Joseph whose telephone number is 703-305-3917. The examiner can normally be reached Mondays through Fridays from 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 703-308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9806.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*Kristine Kincaid*  
KRISTINE KINCAID  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

November 29, 2003

tjj

